

Amendments to the claims:

1 (currently amended): A method of verifying an incremental change to an integrated circuit design comprising steps of:

- (a) receiving as input an integrated circuit design database;
- (b) receiving as input an engineering change order;
- (c) identifying and marking polygons in a generic data stream file in the integrated circuit design database to indicate a current state of the integrated circuit design database;
- (d) applying the engineering change order to the integrated circuit design database;
- (e) analyzing the integrated circuit design database to generate a list of incremental changes to the integrated circuit design database, the list of incremental changes including all new polygons added to the integrated circuit design and all polygons deleted from the integrated circuit design by resulting from the engineering change order;
- (f) adding all cells that have been relocated in the integrated circuit design or that have changed in cell type to the list of incremental changes;
- (g) adding all nets that include the cells that were added to the list of incremental changes in step (f) to the list of incremental changes;
- (h) identifying and marking polygons in the generic data stream file in the integrated circuit design database included in the list of incremental changes to generate a marked integrated circuit design database that distinguishes polygons in the generic data stream file that were changed from the current state; and
- (i) (g) generating as output the marked integrated circuit design database.

2 (currently amended): The method of Claim 1 wherein step (i) (g) comprises translating the marked integrated circuit design database to a file in generic data stream format.

3 (previously presented): The method of Claim 2 further comprising a step of applying a special rule deck to validate the marked integrated circuit design database wherein the

special rule deck includes only design checks and rules applicable to the polygons in the generic data stream file that were changed from the current state.

4 (previously presented): The method of Claim 3 further comprising a step of identifying a design rule violation in the polygons in the generic data stream file that were changed from the current state.

5 (previously presented): The method of Claim 4 further comprising a step of modifying the marked integrated circuit design database to correct the design rule violation.

6 (currently amended): A computer readable storage medium tangibly embodying instructions for a computer that when executed by the computer implement a method program product for verifying an incremental change to an integrated circuit design, the method comprising that includes:

— a medium for embodying a computer program for input to a computer; and  
— a computer program embodied in the medium for causing the computer to perform steps of:

- (a) receiving as input an integrated circuit design database;
- (b) receiving as input an engineering change order;
- (c) identifying and marking polygons in a generic data stream file in the integrated circuit design database to indicate a current state of the integrated circuit design database;
- (d) applying the engineering change order to the integrated circuit design database;
- (e) analyzing the integrated circuit design database to generate a list of incremental changes to the integrated circuit design database, the list of incremental changes including all new polygons added to the integrated circuit design and all polygons deleted from the integrated circuit design by resulting from the engineering change order;
- (f) adding all cells that have been relocated in the integrated circuit design or that have changed in cell type to the list of incremental changes;

(g) adding all nets that include the cells that were added to the list of incremental changes in step (f) to the list of incremental changes;

(h) (f) identifying and marking polygons in the generic data stream file in the integrated circuit design database included in the list of incremental changes to generate a marked integrated circuit design database that distinguishes polygons in the generic data stream file that were changed from the current state; and

(i) (g) generating as output the marked integrated circuit design database.

7 (currently amended): The computer program product of Claim 6 wherein step (i) (g) comprises translating the marked integrated circuit design database to a file in generic data stream format.

8 (previously presented): The computer program product of Claim 7 further comprising a step of applying a special rule deck to validate the marked integrated circuit design database wherein the special rule deck includes only design checks and rules applicable to the polygons in the generic data stream file that were changed from the current state.

9 (previously presented): The computer program product of Claim 8 further comprising a step of identifying a design rule violation in the polygons in the generic data stream file that were changed from the current state.

10 (previously presented): The computer program product of Claim 9 further comprising a step of modifying the marked integrated circuit design database to correct the design rule violation.

11 (new): A method of verifying an incremental change to an integrated circuit design comprising steps of:

(a) receiving as input an integrated circuit design database;

- (b) receiving as input an engineering change order;
- (c) identifying and marking polygons in a generic data stream file in the integrated circuit design database to indicate a current state of the integrated circuit design database;
- (d) applying the engineering change order to the integrated circuit design database;
- (e) analyzing the integrated circuit design database to generate a list of incremental changes to the integrated circuit design database resulting from the engineering change order;
- (f) adding all cells that have been relocated in the integrated circuit design or that have changed in cell type to the list of incremental changes;
- (g) adding all nets that include the cells that were added to the list of incremental changes in step (f) to the list of incremental changes;
- (h) identifying and marking polygons in the generic data stream file in the integrated circuit design database included in the list of incremental changes to generate a marked integrated circuit design database that distinguishes polygons in the generic data stream file that were changed from the current state; and
- (i) generating as output the marked integrated circuit design database.

12 (new): The method of Claim 11 further comprising a step of applying a special rule deck to validate the marked integrated circuit design database wherein the special rule deck includes only design checks and rules applicable to the polygons in the generic data stream file that were changed from the current state.

13 (new): A computer readable storage medium tangibly embodying instructions for a computer that when executed by the computer implement a method for verifying an incremental change to an integrated circuit design, the method comprising steps of:

- (a) receiving as input an integrated circuit design database;
- (b) receiving as input an engineering change order;
- (c) identifying and marking polygons in a generic data stream file in the integrated circuit design database to indicate a current state of the integrated circuit design database;

- (d) applying the engineering change order to the integrated circuit design database;
- (e) analyzing the integrated circuit design database to generate a list of incremental changes to the integrated circuit design database resulting from the engineering change order;
- (f) adding all cells that have been relocated in the integrated circuit design or that have changed in cell type to the list of incremental changes;
- (g) adding all nets that include the cells that were added to the list of incremental changes in step (f) to the list of incremental changes;
- (h) identifying and marking polygons in the generic data stream file in the integrated circuit design database included in the list of incremental changes to generate a marked integrated circuit design database that distinguishes polygons in the generic data stream file that were changed from the current state; and
- (i) generating as output the marked integrated circuit design database.

14 (new): The computer program product of Claim 13 further comprising a step of applying a special rule deck to validate the marked integrated circuit design database wherein the special rule deck includes only design checks and rules applicable to the polygons in the generic data stream file that were changed from the current state.

15 (new): A method of verifying an incremental change to an integrated circuit design comprising steps of:

- (a) receiving as input an integrated circuit design database;
- (b) receiving as input an engineering change order;
- (c) identifying and marking polygons in a generic data stream file in the integrated circuit design database to indicate a current state of the integrated circuit design database;
- (d) applying the engineering change order to the integrated circuit design database;
- (e) analyzing the integrated circuit design database to generate a list of incremental changes to the integrated circuit design database resulting from the engineering change order;
- (f) adding all cells that have been relocated in the integrated circuit design or that have

changed in cell type to the list of incremental changes;

(g) identifying and marking polygons in the generic data stream file in the integrated circuit design database included in the list of incremental changes to generate a marked integrated circuit design database that distinguishes polygons in the generic data stream file that were changed from the current state; and

(h) generating as output the marked integrated circuit design database.

16 (new): The method of Claim 15 further comprising a step of applying a special rule deck to validate the marked integrated circuit design database wherein the special rule deck includes only design checks and rules applicable to the polygons in the generic data stream file that were changed from the current state.

17 (new): A computer readable storage medium tangibly embodying instructions for a computer that when executed by the computer implement a method for verifying an incremental change to an integrated circuit design, the method comprising steps of:

- (a) receiving as input an integrated circuit design database;
- (b) receiving as input an engineering change order;
- (c) identifying and marking polygons in a generic data stream file in the integrated circuit design database to indicate a current state of the integrated circuit design database;
- (d) applying the engineering change order to the integrated circuit design database;
- (e) analyzing the integrated circuit design database to generate a list of incremental changes to the integrated circuit design database resulting from the engineering change order;
- (f) adding all cells that have been relocated in the integrated circuit design or that have changed in cell type to the list of incremental changes;
- (g) identifying and marking polygons in the generic data stream file in the integrated circuit design database included in the list of incremental changes to generate a marked integrated circuit design database that distinguishes polygons in the generic data stream file that were changed from the current state; and

(h) generating as output the marked integrated circuit design database.

18 (new): The computer program product of Claim 17 further comprising a step of applying a special rule deck to validate the marked integrated circuit design database wherein the special rule deck includes only design checks and rules applicable to the polygons in the generic data stream file that were changed from the current state.

19 (new): A method of verifying an incremental change to an integrated circuit design comprising steps of:

- (a) receiving as input an integrated circuit design database;
- (b) receiving as input an engineering change order;
- (c) identifying and marking polygons in a generic data stream file in the integrated circuit design database to indicate a current state of the integrated circuit design database;
- (d) applying the engineering change order to the integrated circuit design database;
- (e) analyzing the integrated circuit design database to generate a list of incremental changes to the integrated circuit design database resulting from the engineering change order;
- (f) identifying and marking polygons in the generic data stream file in the integrated circuit design database included in the list of incremental changes to generate a marked integrated circuit design database that distinguishes polygons in the generic data stream file that were changed from the current state;
- (g) generating as output the marked integrated circuit design database including translating the marked integrated circuit design database to a file in generic data stream format; and
- (h) applying a special rule deck to validate the marked integrated circuit design database wherein the special rule deck includes only design checks and rules applicable to the polygons in the generic data stream file that were changed from the current state.

20 (new): A computer readable storage medium tangibly embodying instructions for a

computer that when executed by the computer implement a method for verifying an incremental change to an integrated circuit design, the method comprising steps of:

- (a) receiving as input an integrated circuit design database;
- (b) receiving as input an engineering change order;
- (c) identifying and marking polygons in a generic data stream file in the integrated circuit design database to indicate a current state of the integrated circuit design database;
- (d) applying the engineering change order to the integrated circuit design database;
- (e) analyzing the integrated circuit design database to generate a list of incremental changes to the integrated circuit design database resulting from the engineering change order;
- (f) identifying and marking polygons in the generic data stream file in the integrated circuit design database included in the list of incremental changes to generate a marked integrated circuit design database that distinguishes polygons in the generic data stream file that were changed from the current state;
- (g) generating as output the marked integrated circuit design database including translating the marked integrated circuit design database to a file in generic data stream format; and;
- (h) applying a special rule deck to validate the marked integrated circuit design database wherein the special rule deck includes only design checks and rules applicable to the polygons in the generic data stream file that were changed from the current state.